

## CLAIMS

What is claimed is:

- 5           1.     A method for reading ahead data pages from a network based file system, said method comprising:
- determining whether a number of available data pages resident to a client node satisfies a defined condition associated with a first value; and
- initiating a read-ahead operation for a second value of data pages from said
- 10   network based file system provided said number of available data pages satisfies said defined condition,
- wherein said second value of data pages can be fetched from said network based file system before an application operating on said client node consumes said first value of data pages.
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2.     The method as described in Claim 1, wherein said defined condition is that said number of available data pages resident to said client node is less than said first value.
- 20           3.     The method as described in Claim 1, wherein said defined condition is that said number of available data pages resident to said client node is equal to said first value.

4. The method as described in Claim 1, wherein said defined condition is that said number of available data pages resident to said client node is less than or equal to said first value.

5. The method as described in Claim 1, further comprising:  
receiving said second value of data pages from said network based file system for providing to said application; and  
adding said second value of data pages to said number of available data pages resident to said client node.

6. The method as described in Claim 1, further comprising:  
providing a data page to said application operating on said client node in response to receiving a data page request from said application; and  
subtracting a value of one from said number of available data pages resident to said client node.

7. The method as described in Claim 1, further comprising:  
receiving a third value of data pages from said network based file system for providing to said application, said third value greater than said first value.

8. A computer readable medium having computer readable code embodied therein for causing a client computer to read ahead data pages from a network based file system, comprising:

ascertaining whether a number of available data pages associated with said client computer satisfies a defined condition associated with a first value; and

transmitting a read-ahead request for a second value of data pages from said network based file system provided said number of available data pages satisfies said  
5 defined condition,

wherein said second value of data pages can be fetched from said network based file system before an application operating on said client computer utilizes said first value of data pages.

10           9.     The computer readable medium as described in Claim 8, wherein said defined condition is that said number of available data pages associated with said client computer is less than said first value.

15           10.    The computer readable medium as described in Claim 8, wherein said defined condition is that said number of available data pages associated with said client computer is equal to said first value.

20           11.    The computer readable medium as described in Claim 8, wherein said defined condition is that said number of available data pages associated with said client computer is less than or equal to said first value.

12.     The computer readable medium as described in Claim 8, further comprising:

receiving said second value of data pages from said network based file system  
for providing to said application; and

adding said second value of data pages to said number of available data pages  
associated with said client computer.

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13. The computer readable medium as described in Claim 8, further  
comprising:

serving a data page to said application operating on said client computer in  
response to receiving a data page request from said application; and

10 subtracting a value of one from said number of available data pages associated  
with said client computer.

14. The computer readable medium as described in Claim 8, further  
comprising:

15 receiving a third value of data pages from said network based file system for  
providing to said application, said third value greater than said first value.

15. A computer system comprising:

a processor;

20 a data bus coupled to said processor; and

a memory device coupled to communicate with said processor for performing:

determining whether a number of available data pages resident to said computer system satisfies a defined condition associated with a first value; and

initiating a read-ahead operation for a second value of data pages from said network based file system provided said number of available data pages satisfies said defined condition,

wherein said second value of data pages can be fetched from said network based file system before an application operating on said computer system consumes said first value of data pages.

16. The computer system as described in Claim 15, wherein said defined condition is that said number of available data pages resident to said computer system is less than said first value.

17. The computer system as described in Claim 15, wherein said defined condition is that said number of available data pages resident to said computer system is equal to said first value.

18. The computer system as described in Claim 15, wherein said defined condition is that said number of available data pages resident to said computer system is less than or equal to said first value.

19. The computer system as described in Claim 15, further comprising:  
receiving said second value of data pages from said network based file system  
for providing to said application; and

adding said second value of data pages to said number of available data pages  
5 resident to said computer system.

20. The computer system as described in Claim 15, further comprising:  
serving a data page to said application operating on said computer system in  
response to receiving a data page request from said application; and

10 subtracting a value of one from said number of available data pages resident to  
said computer system.